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(74) Agents: **VICK, Jason, H. et al.**; Miles & Stockbridge,
Suite 500, 1751 Pinnacle Drive, McLean, VA 22102-3833
(US).

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(71) Applicant (for all designated States except US): **AWARE,
INC.** [US/US]; 40 Middlesex Turnpike, Bedford, MA
01730 (US).

(72) Inventors; and

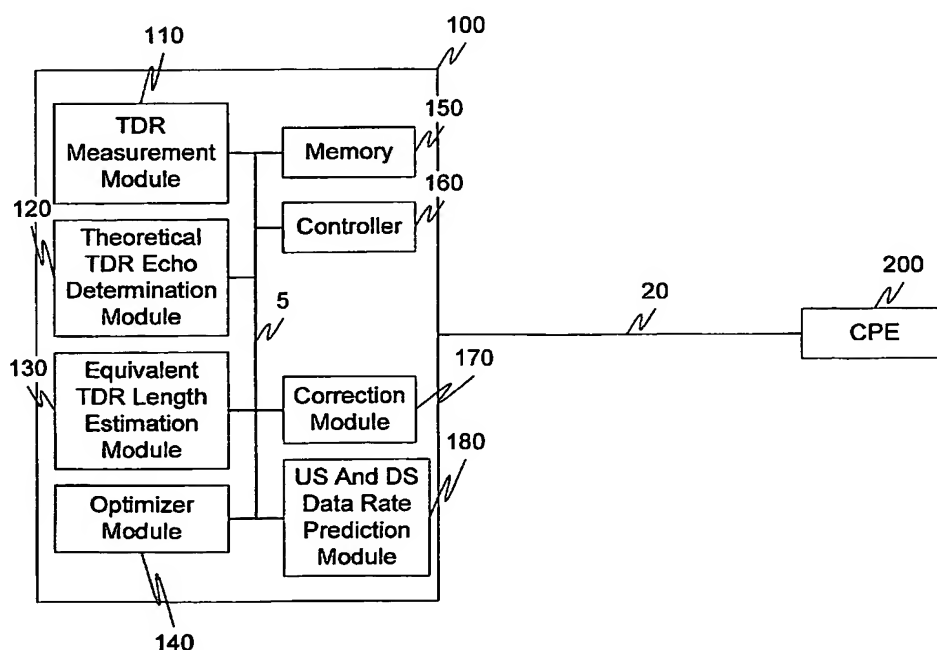
(75) Inventors/Applicants (for US only): **LING, Zheng**
[CN/US]; 158 Concord Road, Apt. G-27, Billerica, MA
01821 (US). **LUND, Michael, A.** [US/US]; 110 Prospect
Street, W. Newton, MA 02465 (US).

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(54) Title: **COMMUNICATION CHANNEL CAPACITY ESTIMATION**



(57) Abstract: Prediction of a channel capacity is accomplished based on a TDR echo without explicitly estimating the topology of the line. The prediction is based on obtaining a measured TDR echo, determining a theoretical TDR echo for a plurality of loop lengths, estimating the equivalent TDR length based on an optimization, updating the equivalent TDR length and utilizing the updated TDR length to predict one or more of the upstream and downstream data rates.

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